



The diode is to protect the regulator from reverse voltage when the control is turned from high to low voltage

The push button disconnects the charging regulator and then fires the SCR. Do not hold it down as excess gate current will occur. Normally in the UP position.

The top electrode is a hand held copper rod.

The bottom electrode is a fixed copper anvil.

The regulator can supply 5 to 19 volts

Any SCR will be suitable. I used a 50 A 200V SCR, but this is too large for this application.

GREEN LED indicates voltage ready
RED LED indicates charge ready

Three 4700uF capacitors provide sufficient energy. The discharge current path must be made from heavy copper wire.

Title		
THERMOCOUPLE WELDER		
Size	Number	Revision
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Date:	14-Jan-2009	Sheet of
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